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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/606,364

06/26/2003

Kyoung-Moon Lim

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08/10/2005

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EXAMINER

SHANKAR, VIJAY

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,364

Applicant(s)

LIM, KYOUNG-MOON

Examiner

VIJAY SHANKAR

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Koyama et al (US 2001/0048408) .

Regarding Claim 1, Koyama et al teaches a driving circuit for a flat panel display (fig.1) comprising: a latch unit which is applied a control signal from a shift register (fig.1) to sequentially sample N-bit digital picture signals and to store the picture signals, and simultaneously output the sampled picture signals by a line pass signal (Fig.1; Paragraph 0050-0067; fig.3; Paragraph 0071-0087 ; and a voltage to current converting unit distributing an outer reference current to a plurality of paths using a current mirror method, and supplying current of different levels to data lines of the display panel according to logical combinations of the picture signals which are applied from the latch unit (figs.1,3,9-10; Paragraph 0095-0107, 0182-0189, 0208, 0222-0225).

Regarding Claim 2, Koyama et al teaches a circuit wherein the latch unit comprises: a first latch unit being applied the control signal from the shift register to sample and store a digital picture signal having a plurality of bit numbers; and a second latch unit outputting the digital picture signal sampled in the first latch unit simultaneously according to an outer line-pass signal. (figs.1,3,10; Paragraph 0050-0067; 0071-0087).

Regarding Claim 3, Koyama et al teaches a circuit wherein the shift register, the latch unit and the voltage to current converting unit are formed in the display panel. (fig.1; Paragraph 0050-0067; 0071-0087).

Regarding Claim 4, Koyama et al teaches a circuit wherein the display panel is an organic electroluminescence display panel. (Paragraph 0193-0194, 0197).

Allowable Subject Matter

4. Claims 5-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is an examiner's statement of reasons for allowance: The prior arts fail to teach a driving circuit for a flat panel display wherein the voltage to current converting unit comprises: a first switching unit for controlling a flow of a reference current by an enable signal; a second switching unit connected to the first switching unit for controlling the flow of the reference signal by the enable signal; a first NMOS transistor for forming a reference path on which the reference current flows between the first switching unit and ground by being applied the reference current on a gate electrode thereof; a plurality of NMOS transistors not including the first NMOS transistor for forming a plurality of current paths in a parallel direction between the data line and the ground of the display panel according to picture signals having a plurality of bit numbers by being applied the reference signal on respective gate electrodes thereof; and a plurality of switching units for controlling switching of the plurality of current paths by being applied the picture signal having the plurality of bit numbers independently as claimed in Claim 5.

Also, Claims 6-15 are allowable because it depends on Claim 5.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

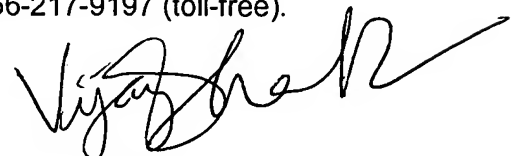
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brody teach the flat panel display for driving.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIJAY SHANKAR whose telephone number is (571) 272-7682. The examiner can normally be reached on M-F 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BIPIN SHALWALA can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



VIJAY SHANKAR
Primary Examiner
Art Unit 2673

VS